Forest Service **R3** Regional Office

333 Broadway SE Albuquerque, NM 87102 FAX (505) 842-3800 V/TTY (505) 842-3292

File Code: 3420 Date: October 18, 2004

Route To:

Subject: Proposed FY 2005 Forest Health Project, Tres Piedras Ranger District

(trespiedrasrd)

To: Forest Supervisor, Carson National Forest

On October 14, Dave Conklin of our staff met with Dave Lawrence (zone silviculturist) to examine the proposed Sawmill Spring project area on Tres Piedras Ranger District. This FY 2005 project would involve thinning and marking of several stands in the Dry Lakes area near Tres Piedras. Conklin, Lawrence and Tim Fruits (Carson NF) had examined this area earlier this year and had tentatively selected a number of stands for possible treatment under our insect and disease prevention/suppression program.

The Dry Lakes area, located three miles southwest of the village of Tres Piedras, is predominantly ponderosa pine forest. Much of the area was pre-commercially thinned 25 to 30 years ago, and some stands were also selectively logged around this time. A few stands have been treated more recently, including the 100 acre Malpais unit, which was sanitation-thinned under our prevention/suppression program in 2000. A number of stands in the Dry Lakes area were successfully prescribe-burned in the spring of 2004.

Ponderosa pine dwarf mistletoe incidence is fairly high in the Dry Lakes area, and most stands have at least some level infection. Bark beetles have caused a significant amount of tree mortality in this area over the past few years. On our earlier visit, we had agreed that our highest priority for treatment (thinning) would be overstocked stands with relatively light dwarf mistletoe infection. More severely-infected areas would best be deferred from treatment, or managed with prescribed fire. Five separate units, each comprised of multiple stands (or portions of designated stands) are included in this FY 2005 proposal:

Unit 1, 163 acres. This area, just south and west of Dry Lakes, consists of large groups of dense blackjack poles and small sawtimber, with smaller groups of mature sawtimber. The younger trees were thinned to 6-8 foot spacing about 30 years ago. A light selection harvest also occurred around this time, which probably removed what were then the more heavily infected (DMR 4-6) overstory trees. Presently, mistletoe infection occurs in scattered pockets throughout the unit, and is light to moderate overall.

We decided to thin this unit to an average spacing of 20 feet, varying spacing (up to 50%) to favor the better dominant and codominant trees. Thinning here would include trees up to 12" dbh. All moderately to heavily infected trees (DMR 3-6) would be cut. Lightly infected (DMR 1-2) trees of good form and vigor over 5" dbh can be retained where needed. All visibly infected trees less than 5" dbh should be cut. In order to retain more of the existing young pine regeneration (which is relatively infrequent), a 10-foot spacing would be applied for uninfected pine saplings 1 to 6 feet tall.





Because of the gentle terrain and good access into this unit, it is expected that much of the larger cut material would be removed by the public for firewood. A prescribed burn is planned here following the thinning treatment; this would potentially provide an additional reducing effect on the mistletoe.

Unit 2, 28 acres. This area, just east of Dry Lakes, is a fairly uniform stand of 70 to 90 year old pine poles and small sawtimber. Like Unit 1, this area was thinned to a 6 to 8 foot spacing around 30 years ago. Most of this unit appears to be free of dwarf mistletoe, although some infected trees occur in the upper portion.

The proposal for this area is simply to mark excess trees (up to 12" dbh) to provide material for commercial fuelwood and/or viga sales. Once this material has been removed, a "follow-up" thinning may be scheduled to remove the remaining infected and excess smaller trees.

Unit 3, 48 acres. This ponderosa pine stand has seen little or no entry for over 50 years. Stocking is highly variable, with overstocked groups of poles and saplings alternating with more open areas. Scattered mature trees occur throughout. This unit has moderate dwarf mistletoe infection, with heavy concentrations of the parasite in a few locations.

This area would either be marked (like Unit 2) with a follow-up scheduled later, or thinned in one operation. Because of the abundance of smaller, suppressed stems in this unit, it may be more efficient to treat this area in a single entry. If this option is selected, we agreed to thin trees (up to 10" dbh) to an average 18 foot spacing. The prescription for spacing of pine saplings and removal of dwarf mistletoe infection would be the same as described above for Unit 1.

Unit 4, 40 acres. The majority of this unit is on a north-facing slope with more mesic conditions and better site quality than the other units. The western side of the unit is pure ponderosa pine, while the remainder of the area contains a significant component of white fir, along with some small aspen clones. Little or no entry has occurred here for at least 40 to 50 years. Dwarf mistletoe infection is very light, with only a few small pockets of infection observed. This area would be marked for small products in 2005.

Unit 6, 52 acres. This unit is a very uniform stand of 70 to 80 year old poles and small sawtimber with light to moderate dwarf mistletoe infection. It was pre-commercially thinned to 6 foot spacing about 25 years ago and presently contains in-excess of 500 trees per acre in most areas. We agreed to thin trees (up to 12") to an average 17 foot spacing, favoring the better dominant and codominant stems. The prescription for removal of mistletoe-infected trees would be the same as that described for Unit 1.

Conclusions. Treatment of each of these units would improve growth rates and vigor of the remaining "crop trees," reducing bark beetle susceptibility. Target basal areas following thinning will range from 50 to 80 square feet. Dwarf mistletoe infection levels will be reduced significantly in most units, and the prescribed fires planned for several of the units following thinning should result in additional disease control.

Please contact us if you have questions about this evaluation or need additional assistance.

/s/ David A. Conklin (for)
DEBRA ALLEN-REID
New Mexico Zone Leader, Forest Health

cc: Leonard Lucero, David E Lawrence, Ernesto Hurtado, Timothy Fruits, John Anhold